

# The Influence Of Family Income And Number Of Children With Nutritional And Development Status Of Children Under Five Years Old On Early Marriage Mother

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## THE INFLUENCE OF FAMILY INCOME AND NUMBER OF CHILDREN WITH NUTRITIONAL AND DEVELOPMENT STATUS OF CHILDREN UNDER FIVE YEARS OLD ON EARLY MARRIAGE MOTHER

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**Abstract**—Early marriage is a marriage at <21 years old. One of the districts in South Kalimantan Province with the percentage of early marriage are above the percentage of Regency was East Martapura District (23,39%). Early marriage leads to lack of mental readiness and cognitive mothers so that mothers are not optimal in carrying out their role and impact on their child growth. This research was an observational analytic research with cross-sectional approach with 205 toddlers as a sample. Primary data was collected by conducting interviews to fill out questionnaires, weight and height measurement, and using *Pre-screening Developmental Questionnaire* (PDQ) to measured child development. There was significant influence between family income ( $p=0.018$ ) and there was no significant influence between number of child ( $p=0.662$ ) with nutrition and development status of children under five years. It is necessary to improve the delivery of health information especially in relation to feeding practices, child hygiene practices, child health care practices and the provision of proper early stimulation to optimize child growth.

**Keywords**—Early Marriage Mother, Nutritional, Development, Children Under Five Years Old

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### I. INTRODUCTION

Early marriage is a marriage performed by women at the age < 21 years (National Population and Family Planning Institution, 2012). Marriage at under 20 years of age in Indonesia is still relatively high (20%) and ranked 37<sup>th</sup> in the world and second highest in ASEAN (UNPFA, 2012). Based on Riset Kesehatan Dasar (Riskesdas) 2010 showed that South Kalimantan Province was first ranked percentage of marriage under 15 years (9%) and third ranked of percentage marriage at age 15-19 years (48.4%). Central Bureau of Statistics survey in 2015 showed South Kalimantan Province second ranked of the highest prevalence of early marriage age (33.68%) compared to the national rate (23%). National Population and Family Planning data of South Kalimantan Province showed Banjar district is district with early marriage rate in women which increase every year and one of subdistrict with the percentage of early marriage is above percentage of district is East Martapura Subdistrict (23,39%) (National Population and Family Planning Institution, 2016; DP2KBP3A, 2016)

Based on data from Banjar District Health Office (2016) in East Martapura Subdistrict, there are children under five years with underweight (14,19%), stunting-severe stunting (23,54%), wasted-severe wasted (21,07%), child developmental problems such as motor delay, language disorders, behavioral disorders, autism, and hyperactivity are also found in communities with a percentage between 13-18% (Banjar District Health Office, 2016).

Women who married at an early age (<21 years) are in the emerging adulthood period in which children in this period have left dependencies in childhood and adolescence but have no adult responsibilities (Arnett, 2000). Instability and lack of the responsibility of the mother who is at that age stage causes the mother have difficulty in developing care and attention to her child so that can impact to child growth and development (Unicef, 2001).

The results of data analysis related to the impact of marriage of children aged in Indonesia conducted by the Statistics Institution of Indonesia (2016) showed that children who born from young mothers had 2 times greater risk to experiencing premature birth, low birth weight, and malnutrition, especially in mothers with middle-lower socio-economic. Women who marry too early also have a higher risk for experiencing psychological and emotional burden so that they tend to feel not confident in their ability in parenting so that it can affect the growth and development of children (Statistik Institution, 2016). This research aims to analyze the factors that influenced nutritional status and development of children under five years old on early marriage mother.

## <sup>5</sup> II. MATERIAL AND METHODS

This research is an observational analytic research with cross-sectional approach. The research location in East Martapura Sub-district, Banjar District, South Kalimantan Province. The study population was all under five years old children with mothers who married at age under 21 years (N=1,028). The sample size is calculated using the formula by Lemeshow (1990) that is equal to 205 under five years old children with criteria 1) Minimum age of 3 months 2) if the mother has more than one toddler, the child taken is the oldest child 3) Mother is the dominant caregiver.

Data collection of socio-demographic characteristics of early marriage mother (first age of marriage, first age of birth, mother's job, family income, mother's education, number of children, feeding practices, hygiene practices, health care practices, and early stimulation used questionnaires and direct interviews to respondents. Nutritional status was measured based on 3 anthropomorphic indicators (BB/U, TB/U, BB/TB) by World Health Organization (WHO) growth chart where the weight measured by weighing scale and height by microtoise/baby length board whereas child development measured by pre-screening development questionnaire (PDQ) From Ministry of Health Republic of Indonesia

Objectives and benefits of the study were explained to respondents orally and in awritten format attached to the questionnaire. A written consent was obtained from those who agreed to participate. Approval of the study was obtained from the/departmental committee of the Faculty. Data was analyzed using SPSS (ver.21.0). All tests were performed at level of significance of 5%. Socio-Demographic data were presented as distribution and frequently table. Influenced Anlaysia of independent variable with dependent variable used Logistic regresion test.

## III. RESULT AND DISCUSSION

### <sup>2</sup> 1. Characteristics of Early Marriage Mother and Children Under Five Years Old

Characteristics of early marriage mother and characteristic of under five years old children are presented in table 1

**Table 1. The Characteristics of Early Marriage Mother and Under Five Years Old Children**

Characteristics	Respondents	
	n=205	%
<b>Early Marriage Mother</b>		
<b>First Age of Marriage</b>		
14 year	3	1,5
15 year	43	21,0

Characteristics	Respondents	
	n=205	%
16 year	23	11,2
17 year	61	29,8
18 year	42	20,5
19 year	21	10,2
20 year	12	5,9
<b>Education Level</b>		
Elementary School	43	21,0
Junior High School	92	44,9
Senior High School	70	34,1
<b>Family Income</b>		
< Rp. 2.258.000,- (Low Income)	149	72,7
≥ Rp. 2.258.000,- (High Income)	56	27,3
<b>Number of Family</b>		
≤ 4 people	135	65,9
> 4 people	70	34,1
<b>Number Of Children</b>		
> 2 children	47	22,9
≤ 2 children	158	77,1

#### Children Under Five Years Old

<b>Sex</b>		
Boy	83	40,5
Girl	122	59,5
<b>Age</b>		
0-6 bulan	9	4,4
6-9 bulan	6	2,9
9-12 bulan	11	5,4
12-24 bulan	42	20,5
> 24 bulan	137	66,8

Total of 141 respondents (68%) were in the age range 16-21 years. The first age of marriage was highest at 17 years old as many as 61 respondents (29.8%) with the youngest age married is 14 years old. Total of 135 mothers (65,9%) have low education level (elementary school-junior high school) and all respondents (100%) didn't work (housewives). Total of 149 respondents (72.7%) had low incomes (<Rp.2258.000,-) because most of the husband worked as farm laborers, construction workers, self-employed and others, Total of 122 under five years old children (59.5%) were female and 83 (40.5%) were boys. Total of 137 under five years old children (66.8%) who were > 24 months of age where the youngest was in the 0-6 month of age.



<sup>2</sup>  
**2. Nutritional and Development Status of Children Under Five Years Old**

Nutritional and Development Status of Children Under Five Years Old Based On WHO growth chart and Pre-Screening Development Questionnaire (PDQ) are presented in table 2

<sup>2</sup>  
**Table 2. Nutritional and Development Status of Children Under Five Years Old Based On WHO growth chart and Pre-Screening Development Questionnaire (PDQ)**

Status Pertumbuhan	Responden	
	n=205	%
<b>Weight For Age (BB/U)</b>		
Underweight	50	24,4
Normal	155	75,6
<b>Height For Age (TB/U)</b>		
Severe stunted	42	20,5
Stunted	28	13,7
Normal	119	58,0
Tall	16	7,8
<b>Weight For Length (BB/TB)</b>		
Severly wasted	25	12,2
Wasted	14	6,3
Normal	150	73,2
Obese	16	7,3
<b>Development</b>		
Disruption	19	9,3
Dubious	27	13,2
Appropriate	159	77,6
<b>Nutritional and Development Status</b>		
Not Appropriate in Age	118	57,6
Appropriate in age	87	42,4

Total of 155 children under five years old (75.6%) include into the category of good nutrition (BB/U), 119 children under five years old (58.0%) include into the normal category (TB/U), and 150 children under five years old (73.2%) include into the normal category (BB/TB). But still found children with growth problems such as malnutrition, stunted-severe stunted and wasted-severe wasted. Total of 159 children under five years old (77.6%) include into the category of appropriate development. But still found toddlers with dubious developments and developmental disruption with highest cases of disturbance in socialization and independence aspect, and speech and language aspect, fine motor aspect and gross motor aspect.

As many as 118 children under five years old include into the category of nutritional and development status is not appropriate with age. Nutritional and development status are not appropriate if there is one of growth disorder seen from 3 anthropometric indicators (BB/U, TB/U and BB/TB) and/or dubious developments and developmental disruption

<sup>3</sup>  
**3. The Influence of Family Income and Number of Children with Nutritional and Development Status of Children Under Five Years Old On Early Marriage Mother**

The influenced of family income and number of children with nutritional and development status of children under five years old are presented in table 3

The Influence of Family Income and Number of Children with Nutritional and Development Status of Children Under Five Years Old On Early Marriage Mother

Table 3. The Influence of Family Income and Number of Children with Nutritional and Development Status of Children Under Five Years Old On Early Marriage Mother

No	Variables	P-value	Exp(B)
1	Family income	0,018*	1,483
2	Number of children	0,662	1,136

\*significant

The result of analysis by using logistic regression test showed that there were influence of family income ( $p=0,018$ , Exp (B)=1,483), while the number of children does not have significant influence on the nutritonal and development status of children under five years old ( $p=0,662$ ).

Early marriage culture in East Martapura sub-district is caused by several factors. The low education of parents and the education of women causes the tendency of early marriage. In addition, early marriage has become a tradition in some ethnic one of them on the Banjar tribe. As a religious community, muslim culture is based on Islamic law which states that if the teenager is old enough, then the parent is obliged to marry their children so man and women don't have a free sex. In addition, early marriage is done because of the assumption in the community that girls should be married soon in order not to become an old maid, other than that the belief that refusing the marriage propose will make the child will be difficult in getting a partner. So that parents as soon as possible will marry off their children even though not old enough.

Based on the result of growth measurement, it's known that although most of the children are included in the good and normal category based on the indicator of BB/U, TB/U and BB/TB but still found toddlers that are included in the category of underweight, stunting-severe stunting, wasted-severe wasted. The results of the assessment using the pre-screening development questionnaire (PDQ) showed that most of the toddlers had the appropriate development but still found toddlers with dubious development status and disruption development with highest cases of disturbance in socialization and independence aspect, and speech and language aspect, fine motor aspect and gross motor aspect. This condition is in accordance with field observations, that most mothers declare children can not be independent of their parents as can not eat alone, wear their own clothes, wash their own hands and still often whine to the mother if want something.

Most vulnerable age in the process of growth and development is the toddler because at that time the child is easily sick and easy to experienced malnutrition. In order for the child doesn't experience nutritional problems, nutritional fulfillment plays an important role, in addition to environmental sanitation and food safety aspects should also be considered for the environment and children food where those aspect be necessary to free of physical, chemical, or biological pollution that can be harmful to the health of children (Soetjiningsih, 2002).

The results of statistical tests show that there is an influence of family income with nutritional and development status of children under five years old. The results of this study are in line with the research conducted by Handini (2013) which shows there is a relationship between family income with nutritional status of children. Mothers in families with lower-middle economic status caused low of food consumption for the family so that it can affect nutritional status in children under five years old (Handini, 2013). Research conducted by Firdaus (2018) showed there was a relationship between family income with social development of children under five years old. The family as the first social environment for children has an important role in the development process. The economic

level of the family affects the ability of parents in the provision of infrastructure such as games appropriate to the age of the child or books for drawing and writing and so on for the process of child developmental stimulation (Firdaus, 2018).

<sup>2</sup>  
There is no influence of the number of children with the nutritional and development status of children under five years old. Mothers who have 1-2 children still have the same possibilities with mothers who have more than 2 children to face nutritional problems because there are other factors that can affect the nutritional status of toddlers one of them poor feeding patterns .If the mother's parenting is less appropriate then it can have an impact on the growth of children. In addition, mothers who already have several children will have more experience in caring so that mothers will be better in caring and fulfilling the nutritional needs for their children (Pasaribu, 2014; Karundeng, 2015).

The results showed that most of respondents have children between 1-2 people and this is in accordance with the number of ideal children, but still found the problem of development in children so it can be said that the mother who has an ideal child is not necessarily not experiencing developmental problems. Research conducted by Tilaar (2016) showed there is no relationship between the number of children with child development. This is because even though the mother has more than 2 children but if the attention and affection are given by mother in balance, then every aspect of development can be run well, especially if the mother does not work (housewives) so that the time provided for children will be more (Tilaar, 2016).

#### IV. CONCLUSION

Study concluded that there were significant influenced between family income of early marriage mothers with nutritional and development status of children under five years old. while the number of children does not have significant influence on the nutritional and development status of children under five years old. It is necessary to improve the delivery of health information especially in relation to feeding practices, child hygiene practices, child health care practices and the provision of proper early stimulation to optimize child growth. Primary Health Center (PHC) can optimize health officers in each village to carry out monitoring activities in developing activities at local health post assisted by cadres who had previously been given about early detection of growth and development.

#### V. ACKNOWLEDGEMENTS

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PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6

PAGE 7